- Q: But on the whole, you got along all right with Burchinal, did you not?
- A: Yes. I did what was required of me and enjoyed my job. I was greatly assisted by the friendship and help of Major General Russell Dougherty, an Air Force officer, who was Burchinal's plans and policies officer. He knew Burchinal quite well personally and understood what he wanted to accomplish. Dougherty was subsequently promoted. He retired as a four-star officer after commanding the Strategic Air Command [SAC].

## Deputy Chief of Research and Development

- Q: When you finished your tour as deputy chief of staff to D/CINC, I understand you returned to the Pentagon where you became the deputy chief of research and development in the Army. Can you tell me what that involved?
- I returned to the Pentagon in A: September 1969 to become deputy to Lieutenant General Cyrus Betts. Betts was a highly professional soldier who had a scientific background. He had done a good job and was due to retire within several months. I calculated that I would take over his job when Betts retired and that General Johnson, the chief of staff, would promote me into the job. I had done a good job on FRELOC and as deputy chief of staff to Burchinal. At that time I did not know that Johnson still resented my work on air mobility and would keep to his promise of not promoting me. At any rate, the question became moot because Betts asked to be extended in his job and his request was approved.



Lieutenant General Edward L. Rowny, 70.

Q: What type of work did your job entail?

A: Most of my work had to do with the Army's acquisition process. DCSR&D [deputy chief of staff for research and development] played a large role helping decide what new equipment the Army should buy, what old equipment warranted being scrapped and what new equipment needed extensive testing and improvement before it was produced in quantity.

I was also in charge of the 40 or so Army laboratories that did research and development for the Army's food, clothing, weapons, ammunition, radios, tanks, and vehicles. In this job I was required to work closely with the Army Science Advisory Board [ASAB] and the Department of Defense Office of Research and Development [DOD R&D].

- Q: Did your work in R&D entail continuing to develop equipment for Vietnam?
- A: No. Most of the research and development on equipment for Vietnam had already been done, and in fact was winding down. We were continuing to work on equipment for a leaner, more durable and lighter Army division. Working in close coordination with the Army Science Advisory Board we were trying to follow the Soviets' lead and stamp out rugged equipment which could be cheaply mass-produced. We made numerous studies to determine whether time between overhaul on radios, weapons, and vehicles would be shorter if we developed spare parts of higher quality or produced ones of lesser quality and simply threw them away instead of trying to repair them.

We also spent considerable effort on reducing the time required for maintenance. This applied largely to helicopters, which were notorious for a high maintenance to use ratio, but also for vehicles, armored personnel carriers, and tanks. We tried to design equipment which could be serviced by a user, rather than a mechanic. For example, we reduced the number of parts that needed to be lubricated on a vehicle by 50 percent. Our goal was to make maintenance as quick and easy as possible.

- Q: What about the Army's laboratories? What did management of them involve?
- A. My work with the Army's labs was of two types. The first type was to assure that they were working on items the Army needed, and not simply spending time and money on pet projects, some of which were not feasible, and others which were not needed. A number of labs had "hobby horse" programs which were interesting, but not very useful. Because of the ingrained habits which many scientists developed, and because pay was not as good as the better scientists could get in civilian laboratories, directing and keeping them was a difficult job.

The second type of work, closely related to the first, was the management of the labs. Most of them had been staffed with good scientists during World War II, but only a few were able to bring in new, younger scientists. My self-appointed task was to determine why some labs were able to recruit and keep innovative scientists and others were not. In some cases it was a matter of just how good the chief scientist was. In other cases it was a matter of associating the lab with a nearby university. For example, labs developing laser range finding equipment worked closely with MIT in Boston. Another, the Harry Diamond Lab, worked closely with the University of Pennsylvania.

Five or six of the labs were superior. Another five or six were very poor. The others were in between. The challenge was to find out what made the better ones good and to try to bring the poorer ones up to a higher standard.

In part, the overall performance of a lab had to do with what was, and in some cases what was not, being developed in civilian life.

- Q: This sounds like a paradox. Can you explain?
- A: Yes. In the late 1960s there was a great deal of emphasis in the private sector on developing smaller computers. The Harry Diamond Laboratory, one of the Army's best, had pioneered in etched circuitry. But then the lab began experimenting with printed circuitry. As a result, there was a great deal of synergism with such companies as IBM and TRW on jointly developed programs.

An example of the second type was the Army lab which developed food. The Army's Natick Laboratory pioneered in food research whereas the civilian sector spent very little money on developing food products; commercial food producers spent almost no money on R&D. The Natick Lab developed such products as powdered milk and dehydrated eggs. They were the first to develop freeze-dried coffee which became a multimillion dollar business in the United States. Natick also pioneered in radiating meat so it could be kept in storage for months without refrigeration.

All in all, the management of the Army labs was a fascinating part of my experience. I like to think I raised the performance of some of them. One technique I used was to take the chiefs of some of the poorer labs with me when I inspected the better ones. By observing how the top labs were able to perform well, the poorer ones benefitted. Another technique was to offer cash incentives to the scientists who developed the best ideas. When we received additional funds for R&D, instead of spreading the money evenly, I held out some to reward the

better scientists, and even the chief scientists of the labs which received the highest ratings.

All in all, the management of the Army's labs was one of the most fascinating and most rewarding of my experiences.

Q: I understand you left the R&D job after about ten months. What were the circumstances of your departure?

## Commanding General, I Corps

- A: What happened was that General Harold K. Johnson retired as the Army chief of staff and was replaced by General William C. Westmoreland. One of Westmoreland's first official acts, in fact on his first day in office, he called me in and asked if I would like to be promoted to lieutenant general and take command of I Corps in Korea. I said I would be delighted to do so and was immediately placed on orders to Korea.
- Q: Had you known Westmoreland personally? Why did he act so quickly to promote you?.
- A. No, I did not know Westmoreland personally. I had, as do most general officers, become acquainted with other general officers and I had met him on a few official and social occasions. We got on quite well. Later, after he had promoted me, I learned that Westmoreland knew of my difficulties with Johnson and had told several people that I had been treated shabbily. He was enthusiastic about air mobility and believed that I had a hand in bringing it to fruition. I also heard that he felt my work on FRELOC deserved recognition. As a result, he apparently felt I had been treated unfairly and wanted to correct the injustice.
- Q: Ambassador Rowny, you left research and development as deputy chief and went to Korea to become the commanding general of I Corps, United States Army from July of 1970 until June of 1971. What did that job entail?
- A: That job entailed commanding all Korean and United States troops along the western half of the DMZ, the demilitarized zone. The eastern portion of the DMZ was under the command of the ROK First Army. I was in command of the more sensitive part of the DMZ because the two capitals-Seoul and Pyongyang-are in the west. Also, this is the area which includes the easier avenues of approach since the east was mountainous. In short, I Corps defended the more vital sector. I had